Gender Role in the Production of Groundnut (*Arachis Hypogea*) In Ezeagu Local Government Area of Enugu State, Nigeria.

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Abstract
This study analyzed the gender role in the production of groundnut (Arachis Hypogea) in Ezeagu local government area of Enugu state, Nigeria. The Specific objective are; to describe the socio economic characteristics of the groundnut producers by gender, ascertain the roles played by the men and women towards the production of groundnut in the study area and to determine the socio economic characteristics of male and female farmers on the production of groundnut. Multistage random sampling was used to select one hundred and sixty groundnut farmers (80males and 80 females) as the sample for the study. Data were collected by means of two sets of structured questionnaire. Information was obtained on: age, marital status, household size, educational qualification, contact with extension agent, farming status etc. Frequencies and percentages were the main descriptive statistical tools utilized for the socio-economic characteristic of the farmers by gender and the roles of the males and females towards the production of groundnut. The inferential statistics used was multiple regression analysis. The findings revealed that the male and female were 61 years of age and above; more male (70%) were married; the male had household size of 4-6 persons, making (53.75%), the female (38.75%) had tertiary education, 31.25%and 32.5% of the female and male respectively had no education, 93.75% of the female had no contact with extension agent while the male was (85%), etc.The multiple regression analysis of the socio-economic characteristics of male rice farmers showed a positively significant relationship between the socio-economic variables (educational level, farm size andfarm organization. While the result of the regression analysis of socio-economic characteristics of the female showed a positively significant relationship between some socio-economic variables (marital status, Household size, farming experience, farm size and source of planting material. The result of the roles played by male and female groundnut farmers showed that the men do more of the clearing (48.65%) and tillage (51.5%) operation while the planting operation (73.125%), weedingoperation (77.5%), fertilizer application (68.125%), harvesting (51.875%) and marketing (69.373%) were mostly done by the women. Therefore, it was recommended from the study that necessary social amenities like good road, electricity, etc. should be provided by the government as well as free education, extension agents, land, etc. The groundnut farmers were encouraged to join cooperative societies.
Keywords: Role, Gender Participation, Groundnut Production

I. Introduction

Agriculture accounts for over 70 percent of the active labour force and more than 23 percent of the Gross Domestic Product (GDP) in Nigeria[1]. In Sub-Saharan African countries like ours (Nigeria), there has been need for an increase in food production and rural poverty reduction. Several attempts have been made by governments (Federal, State and Local Governments) and individuals to get the problem to a stop but the issue has not yet been addressed[2]. [3], suggested that the issue seems very significant because the countries are endemic to desertification and prolonged periods of drought, gender insensitive coupled with protracted socioeconomic and political upheavals. The country's food crisis obviously requires drastic agricultural measures such as identifying gender issues and agricultural transformation which will go a long way towards increased and sustainable food production which bring about positive change in the life of the rural farmers.

Groundnut (*Arachis hypogea*) is an important crop grown in area of about 26 million hectares (ha) in more than one hundred countries around the world under different agro- climatic conditions for its nutritious oil rich kernel[4]. The entire groundnut plants are of economic value. It is an important oil seed crop in Nigeria, widely grown in the tropics and sub-tropics, unlike other legumes, its seeds can be eaten directly without any

special preparation or after roasting or boiling. The seed is rich in protein (About 26%) and it's a source of high quality oil (48-49%) and cake[5].

Groundnut was a revenue earner of first importance to Nigeria's economy, particularly in the 1960s.A total of over 1,000,000 tons of groundnut kernel were purchased by Nigeria's marketing board in each of 1965-66 and 1966-67 seasons and the country was the world's second largest exporter of the commodity. Since then groundnut export has suffered a progressive decline and by 1976, the country found herself an importer of groundnut and it's by products. The production figure for the country stood at 570,000 tons of unshelled pods in 1981[6].

[7], considered groundnut haulm as the most important of its by- products that can be used to supply feed to live stock and its hay providing extra income to small holder farmers. Groundnut is a native of Brazil and believed to have been introduced into African by the Portugues[8]. Groundnut is a very popular crop in Nigeria cultivated across the nation. It is well known to indigenous inhabitant, it has the highest oil content of all food crop and is second only to soybean in term of protein content (20 – 30%), among the food legumes[9]. It is also an important food and cash crop within the agricultural sector of low – income countries in Africa. Groundnut provides small scale farmers with purchasing power. They are nutritious and promote value – added industries in low – income countries. In Africa, groundnut is becoming more important as a source of protein, particularly for those household that cannot afford animal protein sources[10].

Gender relates to socially assigned roles and behaviors attributed to men and women; it refers to the social meaning of biological sex differences. Gender roles are roles that are played by both women and men and which are not determined by biological factors but by the socio – economic and cultural environment or situations[11], [12]. [13], defined gender as those socio – cultural roles and psychological character ascribed to males and females by various societies. This can also be roles of men and women as shaped or detected by the society. It is a set of qualities and behaviors expected from a male or female by the society which changes from society to society and the various functions played by men and women in the society and the relative power they have[14] and [11]. Gender affects the distribution of resources, wealth, work, decision-making, political power as well as enjoyment and entitlements within the family and in public life,[15]. Women in poor households engage on variety of income generating and expenditure saving activities. In some cases, these activities supplement the contribution by males while in others they are the primary or the sole source of household's livelihoods [16]. [17], states that gender roles and expectation are often identified in crop production as factors hindering equal rights and status of men and women with adverse consequences that affects the adoption of innovation. More so, Gender roles are those behaviours, task and responsibilities that societies consider appropriate for men, women, boys and girls [11].

[18], observed that gender constitutes one of the determinants of how poverty is experienced and of wealth creation. Rights and entitlements of men and women to opportunities, resources and decision making are based on socio-cultural norms rather than on human rights or the particular development of men and women. [19], stated that if more food is to be grown, therefore, the need for scientific agriculture such as gender mainstreaming, participation, analysis and comparison should be considered. Gender studies and participation are expected to encourage and ensure increased yield, enhance income and food security for small holder farmers in the country [20]. The impediments to their empowerment include lack of access to technology inputs and credits, unavailability of fertilizers, and cultural and sociological factors that confine men and women to crop cultivation and production[21] and [17]), [22], cited that credits make it possible for farmers to have access to new machines, good seeds, fertilizers, livestocks, labour and other inputs, all of which enable farmers to organize and operate a larger and more profitable business. [23], also cited that limitations in groundnut production ranges from land availability, labour, fund, availability of appropriate fertilizer dosage, disease control, post-harvest challenges and proper storage to marketing.

However, no much records exist in Ezeagu Local Government Area of Enugu State that has focused on 'the roles of gender and the production of groundnut. This has left a vacuum in research of the famous legume-groundnut in the study area.

Objectives of the Study
  i.   describe the socio-economic characteristics of the groundnut producers by gender.
  ii.   ascertain the roles played by the men and women towards the production of groundnut in the study area.
  iii.   determine the socio-economic characteristic of male and female farmers on the production of groundnut.

II. Material and Methods

The study was conducted in EzeaguLocal Government Area of Enugu State, Nigeria. It is one of the seventeen (17) LGAs of the State. Ezeagucomprises of twenty-two (22) communities which includes Olo, Okpogho, Iwolo-oghe, Neke-oghe, Oyofo-Oghe, Amansiodo-Oghe, Akama-ogheObinofia-Ndiagu, Umana-Ndiuno, Obinofia-Ndiuno, ObeleaguUmana, UmumbaNdiuno, Umana-Ndiagu, Aguobu-Umumba, UmunbaNdiagu, UmanaAgba, AwhaNdiagu, AwhaImezi, ImeziOwa, Aguobu-owa, Mgbabu-Owa, and AmankwoOghe.Multi-stage random sampling technique was employed to select communities, villages, and respondents in the study area. Out of the 22 communities that make up the study area; 8 communities were randomly selected and 2 villages were randomly selected from each of these communities which gave a total of 16 villages. Also from each of the sixteen (16) villages randomly selected, ten groundnut farmers (5 males and 5 females) was chosen to give a total of one hundred and sixty (160) groundnut farmers (80 males and 80 females), which represented the sample size. Primary and secondary data were collected for the study. Descriptive and inferential statistic were used to analyze the data

III. Result and Discussion

Socio-Economic Characteristic of the farmers

The table showed that majority (30% of the females and 32.5% of the males) of the respondents fell between the ages of 61years and above while few (12.5% of the females and 13.75% of the males) fell between 41 to 50 years old. The implication of this result is that both male and female groundnut farmers were advanced in age, indicating maturity and great potential for increased production. The finding is in sharp contrast with the findings of [24], who noted that the ability of a farmer to bear risk, be innovative and be able to do manual work decreases with an increasing age.The table alsoshowedthat majority (56.25% of the female and 70% of the males) of the respondents were married, while few (20% and 15% of the female and male) were single and 21.25% of the female and 3.75% of the males were widow. This is in line with the study of [25], who cited that married people have children and these children could serve as a source of labour to reduce cost of production.The table also revealed that majority (47.5 % of the female and 53.75% of the male) of the respondents had household size of 4 and 6 persons, while few (0% of the female and 1.25% of the male) had household size of 13 persons and above. [26], and [27], reported that relatively large household size enhances the availability of farm labour. This view was supported by[24], who noted that large household size is desirable in farm production as rural households rely more on their members than hired workers for labour. The findings were also backed up by the result of [28], who observed that small family size enjoy better economic and social lives, which have great influence on better understanding of environmental conditions. Both household size and number of dependents had an influence on production since they affect consumption and production [29].The table also revealed that majority (38.75%and 33.75%of the female and male) had tertiary education while (31.25% and 32.5% of the female and male) had no education. 6.25% of the female and 11.25% of the male had primary education while (23.75% of the female and 22.5% of the male) had secondary education. Therefore, the implication of the result is that more (38.75%)females than males (33.75%), attended tertiary education, while less male(6.25%) than females (11.25%), had primary education. This is in line with the findings of [30], who sited education and training as been of uttermost important to enhance farmer's capabilities to understand and accept technological innovations in economic activities which will lead to increased and sustainable agricultural production. [31], also noted that majority of the female yam farmers South Eastern Nigeria attended primary school education.

Table no 1. Socio economic characteristic of the Groundnut Farmers

Variable	Female Percentage (%)	Male Percentage (%)
Age		
21-30	22.5	20
31-40	15	16.25
41-50	12.5	13.75
51-60	20	17.5
61 and above	30	32.5
Marital Status		
Single	20	15
Married	56.25	70
Widow	21.25	3.75
Widower	1.25	8.75
Divorced	1.25	2.5
Household		
1-3	17.5	21.25
4-6	47.5	53.75
7-9	32.5	21.25
10-12	2.5	2.5

13 and above	0	1.25
Educational Qualification		
Primary	6.25	11.25
Secondary	23.75	22.5
Tertiary	38.75	33.75
None	31.25	32.5
Farming Status		
Full time	11.25	11.25
Part time	88.75	88.75
Years of experience		
1-5	12.5	6.25
6-10	10	13.75
11-15	11.25	10
16 and above	66.25	70
Farm size		
0.01-0.04ha	57.5	57.5
0.41-0.80ha	26.25	26.25
0.81-1.10ha	15	12.5
1.21-1.60ha	1.25	3.75
1.61 and above	0	0
Contact of extension		
Yes	6.25	15
No	93.75	85
Cooperative Organization		
Yes	8.75	13.75
No	91.25	86.25

Source: field survey, 2016

The table also revealed that few (11.25% of the female and 11.25% of the male) of the respondents were full time farmers while, majority (88.75% of the males and females) were part time farmers. [32], observed that despite the fact that most farmers had farming as their part time occupation, they do engage themselves in order to boost their income and to meet up with other family expenses and commitments. The table revealed that majority (66.25% of the female and 70% of the male) of the respondents had groundnut farming experience of 16years and above. The result also showed that (10% female and 13.75% male) had farming experience of 6-10years while (12.5% female and 6.25 male) had farming experience of 1-5 years. This implied that the male had more farming experience (70%) than the female (66.25%) in 16 years and above while the lowest farming experience is seen in the female (10%) between 1-5 years. Therefore, farming experiences helps to bring a high yield expectation. This agreed with the findings of [33], that years of farming experience has been considered to be a very important tool in decision making and also innovation adoption. [34], reported that farmers would count a lot more on their farming experience for increased output rather than their educational attainment. According to [35],it is really possible to observe improvement in a farmers output based on his experience; this can be attested by the fact that the number of years a farmer has spent in farming business may give an indication of the practical knowledge he has acquired on how he can overcome certain inherent problems as well as improve in his managerial ability and decision in their farm operations. The table indicated that majority of the respondents(57.5% of the females and 57.5% of the males) had farm size of less than 0.01-0.04 hectares while (26.25% of the female and 26.25% of the male) had farm size of 0.41-0.80 hectare. Both male and female had (0%) farm size of 1.61 hectares and above. Nevertheless, [24], noted that farm size in Nigeria are generally small and hence recommended that there is need for urgent land reform policies and programmes that would give farmers access to more land holidays for increased agricultural production. The result also supports the work of [36], who reported that most arable farmers in most developing countries cultivated less than two (2) hectares of land.

The table showed that majority (93.75% of the female and 85% of the male) of the respondents had no contact with extension agent, while few (6.25% of the female and 15% of the male) of the respondents had contact with extension agent. Therefore (6.25% of the female and 15% of the male) had contact with extension agent. This coincides with [37], that very low and weak contact with extension agent renders farmers unproductive and poor. The table showed that few (8.75% of the female and 13.75% of the male) of the respondents belonged to a cooperative organization, while majority (91.25% of the female and 86.25% of the male) does not belong to any cooperative organization. This results are in contrast with the work of [38], who cited that farmer's association helps in training of their members and acquiring of credit from lending agencies at reduced cost. This is also in contrast with the work of [39], which indicated that majority (90%) of the women farmers belonged to women cooperative society while (60%) were members of cassava grower's association in Imo state Nigeria.

The roles of groundnut farmers by gender in Groundnut Production.

From the table 2 the clearing operation was done by the men and women. The result showed that majority (48.125%) of the men do more of the clearing operation. This result showed that men have more manpower and ability to do stressful work than women, the result is supported by [40], who cited that men usually move into traditionally "Women's" crop activities whenthose activities are perceived as having become more productive or profitable.

In the table 2 also, majority (51.88%) of the tillage operation were done by the men while few (13.75%) weredone women. Therefore, men participated more in the tillage operation due to their strength. [41], cited that rural women represent an average forty-three (43) percent of the agricultural workforce in the developing world, but they produce lower yields than male farmers.

The table shows that Majority (73.13%) of the planting operation were done by the women, while few (6.25%), were done by the men. The result showed that women are more involved in planting operation than the men. The result is supported by the work of [42], that women and girls play an important, largely unpaid role in generating family income, by providing labour for planting, weeding, harvesting, threshing crops and processing produce for sale.

From the table, the result showed that majority (77.5%), of women do more of the weeding operation while none (0%), of the men doesn't engaged inweeding operation. This implied that women are more involved in weeding operation and less stressful activities than the men. The result is supported by [42], who stated that women and girls play an important, largely unpaid role in generating family income, by providing labour for planting, weeding, harvesting, threshing of crops and processing of produce for sale.

Table no 2: Distribution of respondents according to role in Groundnut Production

Activities	Men Percentage (%)	Women Percentage (%)
Clearing	48.13	26.25
Tillage	51.88	13.75
Planting	6.25	73.13
Weeding	0	77.5
Fertilizer App	6.25	68.13
Harvesting	3.13	51.88
Marketing	3.13	69.38

Multiple responses
Source: field survey, 2016

The table also shows that majority (68.13%), of the women are involved in fertilizer application while, (6.25%), of the men are less involved in fertilizer application. This result is supported by [43], who cited that are more involved in farm operations like planting, thinning, weeding, fertilizer application, harvesting, storing, marketing and processing.Majority (51.88%), of the women are involved in harvesting of groundnut, while (13.13%), of the men are less involved in the harvesting. The result is in line with the findings of [43], who cited that women are more involved in farm operation like planting, thinning, weeding, fertilizer application, harvesting, storing, marketing and processing.

The table also showed that majority (69.38%) of the women are more involved in marketing activity while (3.13%) of the men were involved in the marketing of groundnut in the study areas. This implied that more women do more of the marketing and sales of groundnut production in the study area.

The socio-economic factors influencing the output of groundnut farmers by gender.

The result of the socio-economic characteristics of male groundnut farmers and the quantity of groundnut is shown in table 3. In the table, four functional forms were estimated: Linear, semi-log, double –log and exponential functions. Among the functional forms, linear functions were chosen as the lead equation based on the econometric and statistical criteria, which includes: Highest number of significant variables, highest F-value (13.405***) and highest R^2 (72 %***).The result showed a positively significant relationship between the socio-economic variables (educational level (X_4), farm size (X_7), Extension contact (X_8), social membership (X_9), and source of planting material (X_{11}) and the quantity of groundnut produced by the male farmers in the study area. They are being related at 0.10% level of significance. The implication was that an increase in independent variables resulted to increase in quantity of groundnut produced (Y) by the male gender.

The coefficient of educational level (X_4) (0.020), is positively and significantly related to the quantity of groundnut produced by the male respondents at 5% alpha level. This suggests that the more educated the male groundnut farmers were the more the increase in the quantity of groundnut produced. This is supported by the findings of [44], that educated farmers may have better understanding and processing of information provided

by different sources regarding new farm technologies, thereby increasing their locative and technical efficiency [45], viewed education and training as being utmost importance in any attempt to enhance farmer's capabilities of understanding and accepting technological innovation in economic activities for sustainability and development.

Farm size (X_7) was significant at 1% level. This implied that the more the farm size, the more quantity of groundnut produced by the male gender. This is supported by the findings of [33] who cited that large farm size means more available land for an increased production.Extension contact (X_8), was highly significant at 1% risk level. This implies that the more contact the male farmers had with extension agents, the more technology and improved knowledge   they will get. [46], reported that agricultural extension is a service which assists farm people through educational procedures, improved farming methods and techniques increases production efficiency for better living and lift the social and educational standards of the rural life.

Farm Organisation (X_9), of male groundnut farmers had a negative coefficient (-1.464). Male farmer's membership to farming organization afforded them the opportunity of specialization, interactions and mixing up with people that come their ways, thereby exchanging information on new improved production technology of groundnut. This is in contrast with *a prior* expectation that increase in social membership led to increase in the quantity of groundnut produced. This result is also contrary to the findingsof [26], who reported that farming organization were sources of good quality inputs and information which lead to increased output of the farmers.

Source of planting material had a positive   coefficient (0.198) and significantly related to the quantity of groundnut produced at 10% levels of probability. This implied that more planting material will bring about an increased and better production of groundnut in the study area. This is in line with the work of [19], that an increased planting material (seedlings) led to an increased plant population and canopy, which covers the soil against environmental hazards such a weeds excessive temperature and pest infestation.

Table no 3: Result of Multiple Regression Analysis on the Effect of Socio-Economic Characteristic of Male Rice Farmers on their output (kg) in the Study Area.

Variables	Linear	+Semi-log	Double-log	Exponential
Constant	133.266	5.693	6.190	809.996
	(0.27)***	(8.15)***	(1.66)***	(0.40)***
Age(years) X_1	-12.887	0.003	-0.125	-24.453
	(-0.37)	(0.05)	(-0.14)	(-0.05)
Marital Status X_2	68.388	0.077	0.113	-139.936
	(0.55)	(0.43)	(0.06)	(-0.13)
Family Size X_3	31.113	0.051	0.462	154.038
	(0.63)	(0.71)	(0.32)	(0.20)
Educational Level X_4	-45.468	-0.097	-0.100	-77.686
	(-1.34)	(-1.99)**	(-0.19)**	(-0.28)
Farming Status X_5	-203.112	-0.400	-0.149	-203.316
	(-1.79)*	(-2.45)***	(-0.07)	(-0.18)
Years of experience X_6	67.117	0.107	-0.052	21.347
	(1.80)*	(2.00)**	(-0.04)	(0.03)*
Farm size (ha)X_7	86.017	0.140	-0.080	-152.685
	(2.13)**	(2.41)**	(-0.04)	(-0.13)
Cooperative X_8	-68.593	-0.050	0.000	0.000
	(-0.80)	(-0.41)	(0.00)	(0.00)
Source of credit X_9	-12.838	0.000	0.126	109.687
	(-0.44)	(0.00)	(0.18)**	(0.29)**
Source of planting material X_{10}	52.635	0.098	-0.209	-201.482
	(0.90)	(1.17)	(-0.14)	(-0.25)
Source of labour X_{11}	4.915	-0.029	-0.070	-110.078
	(0.06)	(-0.24)	(-0.04)	(-0.13)
Applicationof agro-chemical X_{12}	173.589	0.247	0.113	46.008
	(1.85)*	(1.83)***	(0.05)	(0.04)
Extension X_{13}	-92.554	-0.087	0.000	0.000
	(-1.15)	(-0.75)	(0.00)	(0.00)
R^2	0.4283***	0.7930***	0.7032***	0.7454***
F-value	2.65***	3.44***	0.43***	0.53***
MSE	233.56	0.33578	0.4107	220.92

***,** and* represent 1%,5% and 10% level of probability respectively. Values in bracket are the t-values.
Source: field survey, 2016.

Table 4 displayed regression result showing the socio-economic characteristics of female respondents
The table comprises of four functional forms that was estimated: linear, semi-log, double log and exponential functions while linear functions was chosen as the lead equation based on the econometric and statistical criteria, which includes: highest number of significant variables, highest f-value (7.380***) and highest R-square value (59%***) which were both significant at 1% level respectively.

The result from table 14, showed a positively significant relationship between some socio-economic variables (Age (X_1), marital status (X_2), Household size ((X_3), farming status (X_5), farming experience (X_6), farm size (X_7) and source of planting material(X_{11}) and the quantity of groundnut produced by the female in the study area.

There was a positively significant coefficient (0.104) relationship in Age at 10% risk level. This indicated that the older the female groundnut farmers became, the more the quantity of groundnut will be produced. This might imply that there is an increasing productivity with advanced age. This is in line with [27], who reported that the older a farmer becomes, the more he or she is able to combine his or her productive resources in an optimal manner, given the available resources.

The coefficient (0.110) of marital status was positive and significant at 10% risk level. This indicated that married people tend to produce or be more involved in groundnut farming than single people. This was supported by the work of [25] that married people have children and these children could serve as a source of labour to reduce cost of production.

Household size was positive and significant at 10% level. This implied that increased household size has more access to labour which will bring about an increase in the quantity of groundnut produced by the female. This finding is supported by [33], who revealed that large household size enhanced the availability of labour for on-farm and off-farm activities.

The farming status was negatively significant at 10% level. The implication was that the status of any female farmer (part time or full time) will help bring about more or less production, focus and management. [32], observed that despite the fact that most farmers had farming as their part time or full time occupation, they do engage themselves in other economic activities.

The result of the coefficient of farming experiences (0.245), was positive and significant at 10% level. The implication according to [47], is that the positive sign of the variable connotes that highly experienced farmers have high level of managerial ability and decision in their farm operations. [26], cited that farmers in farming business are prone to inefficient utilization of available resources. The result also goes in line with [24], who reported that farmers count more on their experience than educational attainment in order to increase their productivity.

The coefficient of farm size (0.000) was positive and significant at 1% level of probability. The result showed that more farm land (or size of farm) would lead to more production. [48], noted that small farms have a high labour to land ratio. [33], cited that large farm size means more available land for an increased production.

The result from table 14 showed that the coefficient (0.100) of the source of planting material was positive and highly significant at 10% level of probability. This showed that a good source of planting material is necessary for optimum yield in groundnut production. This was supported by [19], which an increased planting material (seedlings), led to an increased plant population and canopy which covers the soil against environmental hazards such as weeds, excessive temperature and pest infestation.

Table no 4: Result of multiple Regression Analysis on the Effect of Socio-Economic Characteristics of Female Rice Farmers on their output (kg) in the Study Area.

Variables	Linear	Semi-log	+Double-log	Exponential	
Constant		5.092	4.847	4.490	-63.653
		(0.03)	(11.84)*	(17.54)***	(-0.45)
Age(years) X_1		10.919	0.015	0.183	94.998
		(0.65)	(0.39)	(1.74)	(1.65)
Marital Status X_2		15.046	0.052	-0.680	-272.785
	(0.46) (0.69)	(-3.48)*** (-2.54)**			
Family Size X_3		-21.411	-0.044	-0.096	-59.166
		(-0.93)	(-0.83)	(-0.64)	(-0.73)
Educational Level X_4		-12.340	-0.031	-0.028	-26.360
		(-1.02)	(-1.13)	(-0.50)	(-0.86)
Farming Status X_5		-6.445	-0.006	0.105	32.246
		(0.25)	(-0.11	(1.36)	(0.76)
Years of experience X_6		-15.027	-0.025	0.120	32.264
		(-0.78)	(-0.56)	(0.92)	(0.45)
Farm size (ha)X_7		233;727	0.607	1.037	344.783
		(7.83)***	(8.75)***	(7.84)***	(4.76)***
Cooperative X_8		-19.673	-0.069	0.000	0.000
		(-0.65)	(-0.99)	(0.00)	(0.00)
Source of credit X_9		-2.158	-0.012	-0.007	-8.978
		(-0.20)	(-0.46)	(-0.10)	(-0.23)
Source of planting materialX_{10}		5.708	0.026	0.425	131.185
		(0.19)	(0.38)	(4.00)***	(2.25)**
Source of labour X_{11}		-26.735	-0.055	0.719	259.985
		(-0.60)	(-0.053)	(3.09)***	(2.04)*
Application of agro-chemicalX_{12}		-12.888	-0.082	0.405	222.899

	(-0.30)**	(-0.81)	(3.05)***	(3.07)***
Extension X_{13}	3.125	0.014	0.000	0.000
	(0.11)	(0.23)	(0.00)	(0.00)
R^2	0.7098	0.7532	0.9632	0.9196
F-value	8.66***	10.80***	26.16***	11.44***
MSE	88.251	0.20499	0.09959	55.559

***,** and * shows significant at 1%,5% and 10% level of probability respectively. Values in bracket represent the t-values.
Source: field survey, 2016.

IV. Conclusion and Recommendation

The study has revealed the gender roles in the production of groundnut in the study area. The findings indicated that the both gender are of aged and male were married than female, more female had tertiary education than male and both are part time famers. The result of the roles played by the male and female in the production of groundnut showed that majority of the clearing operation was done by the men, while the planting, weeding, fertilizer application, harvesting and marketing operation were done mostly by the female.The result of the regression analysis for the male using linear functional form showed that educational level, farm size, farm organisation and source of planting material were positive and significant which means that an increase or better utilization of available resources will lead to more production in the study area. Also, the result of the regression analysis for the female using linear functional form showed that marital status, household size, farming experience, farm size and source of planting material were positive and significant at all levels.

The study therefore recommends that the government should encourage people(both male and female to go into groundnut production by providing the necessary social amenities such as good access road, electricity, pipe- borne water, etc. Machinery should also be provided so as to save time and energy, making of land available to the groundnut farmers will also increase production; especially the removal of barriers hindering women to land ownership and Extension agents should also be provided so as to educate the groundnut farmers on new technologies and innovation and to serve as a link between the research institutes or government and the farmers. The extension agents should be equipped properly.

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